trolled, multicenter clinical study in which patients have been treated with ex-vivo expanded autologous human corneal epithelial cells containing stem cells. Symptoms like pain, photophobia and burning, together with visual impairment, contributed to assess quality of life associated with the condition, while Quality Adjusted Life Years (QALYs) have been used to compare the outcomes of the recent approved product with conservative management, in a comparable patient pool. The considered cost data have been obtained from Italian tariff nomenclature databases. **RESULTS:** Patients treated with conservative management presented QALY values between 6.51 and 9.71, depending on LSCD severity, whereas treatments with ATMP ensured to patients between 10.22 and 13.60 QALY, with a total utility gain between 3.71 and 4.60 QALYs (result being discounted by 3.5% yearly). As a result of this utility gain, the approved product would meet an ICER threshold of 40,000 €/QALY cost of around €160,000 per treatment. **CONCLUSIONS:** Offering long-term, potentially life-long, effectiveness after single treatment, ATMP analyzed delivers cost reduction in the long term management of LSCD, despite higher initial costs compared to conservative approach. The CEA of the product demonstrated a significant gain in terms of QALYs, amortizing the initial outlay for the treatment.

PSY59

ECONOMIC EVALUATION OF LIDOCAINE/TETRACAINE PATCH VERSUS LIDOCAINE/PRILOCAINE CREAM FOR TOPICAL ANAESTHESIA BEFORE VASCULAR ACCESS IN EGYPT

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OBJECTIVES: The aim of this study was to estimate the cost-effectiveness of lidocaine/tetracaine patch versus lidocaine/prilocaine cream for topical anaesthesia before vascular access. **METHODS:** A decision analytic model comparing lidocaine/tetracaine patch versus lidocaine/prilocaine cream for topical anaesthesia before vascular access was constructed based on the current clinical practice in Egypt and was derived from published sources. The clinical parameters were derived from a double-blind, randomized, paired study. The utility of the health states was derived using the available published data. Direct medical costs were obtained from the Ministry of health tariff in Egypt. No discounting was performed. Probabilistic sensitivity analysis (PSA) was conducted. **RESULTS:** The total quality-adjusted life-years (QALYs) of Lidocaine/Tetracaine patch was estimated to be 0.914147, whereas that of the lidocaine/prilocaine was estimated to be 0.826098 (with a net difference of 0.088049 QALYs). The total costs for Lidocaine/Tetracaine and lidocaine/prilocaine were EGP 93.19 and EGP 60.00 respectively (with a net difference of 33.19 EGP). Thus the incremental cost-effectiveness ratio (ICER) for Lidocaine/Tetracaine was EGP 376.95 /quality-adjusted life year. Results from PSA indicate that Lidocaine/Tetracaine had an 100% chance of being cost-effective at our EGP 70,000 per QALY threshold. **CONCLUSIONS:** The present study concludes that Lidocaine/Tetracaine (Heated Patch Delivery System) is cost effective option for topical anaesthesia before vascular access when compared with lidocaine/prilocaine (Cream) based on the threshold stated by world health organization (3xGDP/capita) for low and middle-income countries.

PSY60

AN IN SILICO HEALTH ECONOMIC MODEL APPLIED TO CRYOPYRIN ASSOCIATED PERIODIC SYNDROMES (CAPS): COST EFFECTIVENESS OF PREVENTION EFFECTS OF ULTRA-ORPHAN DRUGS FOR RARE DISEASES

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OBJECTIVES: This three-year, international, multicentre, longitudinal, observational, cost-effectiveness study named RaDiCEA (RareDisease &Cost-EffectivenessAnalysis) will assess the economic evaluation (cost of illness - COI and cost-effectiveness analisys - CEA) of innovative therapies (i.e., anti IL-1 agents), quality of life (QoL) and effects of the prevention of otherwise irreversible central nervous system, eye, ear, kidney, and cartilage damages of different treatment strategies for cryopyrin-associated periodic syndromes (CAPS) of adults and children. **METHODS:** A virtual time-cohort approach and a Markov model simulating health states corresponding to different CAPS severity will be developed to assess the cost-effectiveness of either anti IL-1 agents or other than anti IL-1. Due to the lack of a CAPS-specific severity index/damage score, a linear combination of existing indexes and damage scores related to specific organs and systems will be used to rank patient's health statu. Coefficients of the resulting function will be assigned following a top-down (Delphi) approach and an interim-ex post principal component analysis. The model quantifies resource utilization for patients' care in the National Health Systems' perspectives and a broader societal perspective. QoL will be evaluated using EQ-5D questionnaires. Robustness of outcomes wil be tested through univariate and probabilistic sensitivity analyses. **RESULTS:** The RaDiCEA project will assess the long-term effectiveness of different potentially life-long treatment strategies and COI, while exploring the feasibility of a new CEA model to be generated from a rare disease (CAPS) observational study. The economic outcomes will be given as the number of years spent in each health state, the related yearly costs and QoL. **CONCLUSIONS:** The importance and novelty of the model is twofold: i) in its application, adopting the cost-effectiveness approach for assessing the impact of CAPS therapies, and ii) in the methods, extending the analyses of the impact of CAPS therapies in reducing the speed of disease progression.

PSY61

PHARMACOECONOMIC ANALYSIS OF TREATMENT PATIENTS WITH CRANIOCEREBRAL INJURY IN UKRAINE

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OBJECTIVES: Comparative evaluation of the cost effectiveness of treatment of patients with acute craniocerebral injury (CCI) efficiency using two therapy schemes in Ukraine. **METHODS:** "The cost-efficiency" method was used to carrying out the research. Analysis was based on the results of opened randomized trial on the efficacy of L-Lysine Aescinat in patients with craniocerebral injury, carried out in the department of anesthesiology and intensive care at Regional hospital in Dnepropetrovsk. The clinical trial involved 38 patients randomized to main and control group (each group contained 19 patients). Standard therapy (fentanyl, diazepam, tramadol, adrenaline, furosemide, mannitol) and injections of L-Lysine Aescinat were administrated in main group; only standard therapy was administrated in the control group. Treatment of patients was carried out during 7 days. Direct costs were taken into account for therapy course expenditures schemes studying. Drugs prices were taken from Morion`s information system (May, 2015). As an indicator of the effectiveness after treatment were considered the following: decreasing of intracranial hypertension, degree of brain perifocal edema and degree of conscious disturbance (Glasgow Coma Scale). **RESULTS:** The treatment efficiency in main group patients was 73,68 % and 15.79 % in controls. Treatment costs were € 55,86 and € 31,84 correspondingly. "The cost-efficiency" analysis demonstrated that CER in main group was € 75,81and CER in control group was € 201,65. **CONCLUSIONS:** The "cost-efficiency" analysis showed the use of L-Lysine Aescinat in combination with standard therapy to be more effective and less expensive for treatment of 1 patient with craniocerebral injury in Ukraine The obtained results of pharmacoeconomic analysis will allow to optimize the costs of disease treatment by a state, insurance companies and patients.

PSY62

COST-EFFECTIVENESS OF RUXOLITINIB FOR THE TREATMENT OF MYELOFIBROSIS IN FINLAND. ECONOMIC EVALUATION BASED ON FINNISH AURIA BIOBANK DATA ON HEALTH CARE RESOURCE UTILIZATION

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OBJECTIVES: Myelofibrosis (MF) is a rare and life-threatening myeloproliferative disorder characterized by progressive scarring of the bone marrow and a number of severely debilitating symptoms. The objective of this analysis was to estimate cost-effectiveness of ruxolitinib (RUX) in a treatment of MF patients compared with best available therapy (BAT) in Finland. **METHODS:** Efficacy data from RUX pivotal trial COMFORT-II was used as the most relevant clinical evidence of RUX versus BAT. A survival-based decision model with health states On-Treatment, Off-Treatment and Dead was constructed. Transitions between the health states were determined by overall survival (OS) and treatment discontinuation collected in COMFORT-II. Treatment discontinuation was used a proxy for progression. The model was calculated as a cohort expected value analysis with each health state having associated costs and utilities. Costs for health states included drug acquisition costs and health care resource use (HRU) classified by MF risk status (high or intermediate-2) and leukemia. HRU estimates are based on patient level data (n=88) from Auria Biobank, and utility values were based on a standard gamble study. Finnish health care payer perspective was employed. The time horizon in the base case was a lifetime with 3 % discounting for costs and outcomes. **RESULTS:** Treatment with RUX produced 2.43 incremental QALYs with the incremental cost of €102,802 compared to BAT, resulting incremental cost-effectiveness ratio 42,367€/QALY. Sensitivity analyses showed that the model was robust to changes in model inputs. The most impactful parameters were the disease management costs and the hazard ratio for OS. **CONCLUSIONS:** The results suggest that the improvements in OS provided by RUX translate into long term gains in QALYs with reasonable incremental costs. The use of robust real-life data from Auria Biobank is beneficial in managing uncertainty that relates to assumptions and data inputs of the model.

PSY63

COST-EFFECTIVENESS OF MANUAL THERAPY VERSUS PHYSICAL THERAPY IN PATIENTS WITH SUB-ACUTE AND CHRONIC NECK PAIN: A RANDOMIZED CONTROLLED TRIAL

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OBJECTIVES: To assess the societal cost-effectiveness of manual therapy (MT) in comparison with physical therapy (PT) among Dutch sub-acute and chronic non-specific neck pain patients. **METHODS:** An economic evaluation was conducted alongside a 52-week randomized controlled trial (RCT). In this RCT, 181 patients were randomized to the MT group (n=90; mainly receiving mobilization) and PT group (n=91; mainly receiving exercise therapy). Clinical outcomes included perceived recovery (yes/no), functional status (continuous and clinically relevant improvement - yes/no), and quality-adjusted life-years (QALYs). Societal costs were measured using self-reported questionnaires at three, 7, 13, 26, 39, and 52 weeks. Missing data were handled using multiple imputation. Bootstrapping techniques were used to assess the uncertainty of the results. **RESULTS:** After 52 weeks, there were no significant between-group differences in clinical outcomes. During follow-up, intervention costs (€-32; 95%CI:-54 to -10) and healthcare costs (€-126; 95%CI:-235 to -32) were significantly lower in the MT group than in the PT group, whereas unpaid productivity costs were significantly higher (€186; 95%CI:19 to 557). Societal costs did not significantly differ between groups (€-96; 95%CI:-1975 to 2022). For QALYs and clinically relevant improvement in functional status, the maximum probability of MT being cost-effective in comparison with PT was low (≤0.54). For perceived recovery and continuous improvement in functional status, results showed that a large amount of money must be paid per additional unit of effect to reach a reasonable probability of cost-effectiveness. **CONCLUSIONS:** The findings indicate that MT was not cost-effective in comparison with PT in patients with sub-acute and chronic non-specific neck pain for perceived recovery, functional status, and QALYs.